

OPEN LETTERS.

The home of Calypso.

Some years ago, while making a botanical exchange with Prof. W. W. Bailey, the poet-botanist of Rhode Island, I was accused by him of prodigality, because I sent him so many specimens of *Calypso borealis*. But I could then afford to be prodigal, for I was located in the very court of the goddess, viz:—the cedar region of northern Vermont.

Two years ago I met, at his summer home under the shadow of Mt. Lafayette, the genial author, botanist and world-wide traveler, Dr. Prime. To him I boasted that in half a day I could gather, in Caledonia Co., Vt., fifty specimens of *Calypso*. He thought that, in Essex Co., he could, in the same length of time, gather a hundred. The two counties are adjacent, and cold, cedar swamps abound in both. Even there it must be reckoned as a very rare plant; but I have wondered if, in any other state, it is as little rare. It is found in Maine, on the Mohawk, in Wisconsin and Minnesota, in Oregon and Washington, and in the British provinces. But, if one may judge by the parsimony which most collectors evince in parting with specimens, it is nowhere found as plentiful as in the locality mentioned.

It prefers the shade of the arbor-vitæ. It grows on low, moist ground—not wet ground—but on knolls a foot or so above the swamp level. A mass of dead *Sphagnum* overgrown by a thick layer of *Hypnum* is its favorite bed. The corm and roots rest entirely in the moss, seeming to have little or no connection with the underlying humus. Two or more corms are often united, the one of the preceding year persisting.

Though searching carefully, I have never found fruit. This must be from lack of fertilization by insects. At the blooming season—May 15 to May 30—there are few insects abroad. I have never seen one hovering about *Calypso*.

The pressed specimen gives but a poor idea of the beauty of the flower. Pressing usually throws the lip up out of position, giving it a ringent, flaunting, turn-up-your-nose sort of a look, but as it grows, the lip is obliquely pendant—as much so as that of *Cypripedium acaule*. Dainty beauty is the fitting title. It is comparable only to a bright, modest girl dressed in pink. In Wood's *Class-Book of Botany* (1846), the flower is said to be as "large as that of a *Cypripedium*". He must have had *Cypripedium arietinum* in mind, for no other species of native *Cypripedium* has a flower so small. Of forty specimens of *Calypso*, the length of lip averages less than three-quarters of an inch, and in some it is barely half an inch. The same specimens give, average height of plant, including corm, 4.9 inches: average length of leaf-blade, 1.3 inches: average width, 1.1 in. Of these, three have two flowering stalks, apparently from the same corm.

Some stations in Vermont where *Calypso* was formerly found are known to be exhausted owing to clearing of the woodland, but there is comparatively little danger of its extinction in the region of which I speak. In spite of its pink perianth, it is hard to find, and an expert collector might pass it by unseen. Moreover, many of its haunts are likely to be left in timber perpetually. So I think that northern

Vermont may fairly be called the home of Calypso, but if some botanist between Sitka and Superior shall write me that he finds Calypso as common as *Carex*—why, I congratulate him, that's all.—F. BLANCHARD, *Washington, D. C.*—[See p. 230. EDS.]

NOTES AND NEWS.

J. W. TOUMEY has been elected botanist to the state college and experiment station at Tucson, Arizona.

THE LAST part of a key to the genera and species of British mosses by Rev. H. G. Jameson appears in the July *Journal of Botany*.

THE SUMMER school of botany at Harvard University closed August 1 a very successful 5-weeks session. About 20 were in attendance.

PROF. DR. KARL von Nägeli, of the University of Munich, author of many valuable botanical works, and a philosophical botanist of deep insight, is dead at 74 years of age.

THE LIBRARY of the late Dr. Schenk and that of Dr. Karl Sanio, who died last February, have been purchased by Weigel (Leipzig) and the works will shortly be offered for sale.

DR. EDWARD PALMER, the well known collector, started about the middle of July for a year's exploration of western Mexico. His friends will be glad to know that he is much improved in health and anticipates a very profitable year of work.

VON TUBEUF has lately published a book¹ which contains good and practical hints as to the identification of German forest-trees at a stage shortly after the germination, together with descriptions of the fruits and seeds of the same trees. Although strictly confined to the native or cultivated forest-trees of Germany, the book might undoubtedly be of some interest and use also to American students in this line.—T. H.

C. SAUVAGEAU has made a very comprehensive study of the leaf-structure of the *Potamogetonaceæ*.² The principal purpose of his investigations were not only to give a general sketch of the internal structure of the leaf, but also to show the importance of anatomical characters in identifying species, when represented merely by fragments; and finally to illustrate the relation between structure and medium. After giving some introductory remarks concerning the classification of this group and the general influence of medium upon structure, the author describes and figures the leaf-structure of representatives of the *Zostereæ*, *Posidoniæ*, *Potamogetoneæ*, *Cymodoceæ* and *Zannichellieæ*. The paper contains several new observations besides valuable references and comparisons with similar studies, made by others.—T. H.

¹ Samen, Früchte und Keimlinge der in Deutschland heimischen oder eingeführten forstlichen Culturpflanzen. Berlin, 1891.

² Sur les feuilles de quelques Monocotylédones aquatiques. *Dissert.* pp. 200. Paris, 1891.